

Appl'n No: 10/519,591
Amdt dated September 10, 2008
Reply to Office action of June 10, 2008

AMENDMENTS TO THE DRAWINGS

The attached replacement sheet of drawings, including Figures 1 and 2, replaces the previously submitted sheet of drawings including Figures 1 and 2. More specifically, Applicants have amended Figure 2. The replacement sheet has been clearly labeled "Replacement Sheet" in the page header.

Attachment: 1 Replacement Sheet of drawings including Figures 1 and 2

REMARKS

Claims 1-10 and 12-32 are pending in the above-captioned application. Claim 11 has been cancelled. Claims 20-30 have been previously withdrawn in response to a restriction requirement. Claims 1, 5, 12, and 16 have been amended. Claims 31 and 32 have been added. Claims 1, 21, 31, and 32 are in independent form.

Specification

The specification has been amended to clarify terminology set forth in the application as filed. Applicants attest that no new matter has been added thereto.

Drawings

Applicants have attached 1 replacement sheet of drawings hereto directly following these Remarks. The replacement sheet has been labeled "Replacement Sheet" in the page header as per 37 C.F.R. §1.121(d). Applicants attest that no new matter has been added thereto.

In amended Figure 2, reference character "54" has been amended to "57" to correspond with the ball bearing member 57, as set forth in the specification; and reference character "56" has been amended to "55" to correspond with the plurality of ball bearings 55, as set forth in the specification.

Claim Rejections - §112

Claims 5-19 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse the rejection.

The Examiner states that there is insufficient antecedent basis for the limitation "said second flange" in line 1 of claim 5. In response, Applicants have amended line 1 of claim 5 to set forth "said first flange", there being proper antecedent basis for such limitation in claim 4.

Applicants have cancelled claim 11.

Claims 6-10 and 12-19 depend from amended claim 5.

Therefore, Applicants respectfully request that the rejection of claims 5-19 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which application regards as the invention be withdrawn

Claim Rejections - §103

Claims 1-17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,394,248 to Monahan et al. ("the '248 reference") in view of U.S. Patent 2,885,896 ("the '896 reference") to Hungerford, Jr. et al. Applicants respectfully traverse the rejection.

Amended claim 1 of the above-captioned application includes the limitations "a carrier rotatably mounted on said hub, said carrier including a hooked slot and a helical second slot formed therein" and "a clutch spring extending between a hooked proximal end and an opposite distal end, wherein said hooked proximal end is retained in said hooked slot to prevent relative movement between said hooked proximal end of said clutch spring and said carrier"

The Examiner identifies an input hub 16 and a wrap spring 22 in the '248 reference as equivalent to the carrier 75 and the clutch spring 71, respectively, in the above-captioned application. Specifically, the Examiner states in reference to claims 11 and 12, "the clutch spring extends between a hooked proximal end (C) and an opposite distal end (A) (see Fig. 2)." Applicants do not see reference characters (C) and (A) in Figure 2 and respectfully ask for further clarification.

The '248 reference does not provide any disclosure of a hooked slot in the input hub 16 or the wrap spring 22 having a hooked proximal end. Further, the '248 reference does not provide any disclosure of a hooked proximal end of the wrap spring 22 retained in a hooked slot in the input hub 16. Rather, the '248 reference discloses that the "wrap spring 22 is located within a spring receiving cavity 44 defined between the composite surface 34, 42 and the first cylindrical portion 26" of the input hub 16. *See* column 7, lines 37-39. When the wrap spring 22 is "received in the cavity 44, the wrap spring 22 frictionally engages with and exerts a radially outward normal force on both of the inner cylindrical surfaces 34 and 42" of the input hub 16

and pulley sheave 18. *See* column 7, lines 42-45. Therefore, the '248 reference does not disclose a carrier including a hooked slot and a clutch spring having a hooked proximal end that is retained in the hooked slot to prevent relative movement between the hooked proximal end of the clutch spring and the carrier, as specifically required by amended claim 1 of the above-captioned application.

Applicants have cancelled claim 11.

Claims 2-10 and 12-17 depend from amended claim 1 and, as such, are construed to incorporate by reference all the limitations of the claim to which they refer, *see* 35 U.S.C. §112, fourth paragraph.

Therefore, Applicants respectfully request that the rejection of claims 1-17 under 35 U.S.C. §103(a) as being unpatentable over the '248 reference in view of the '896 reference be withdrawn.

Independent claim 31 has been added. Independent claim 31 includes the limitations "a hub configured to be fixedly assembled to the shaft, said hub including a helical first slot formed therein"; "a carrier rotatably mounted on said hub, said carrier extending axially between opposite first and second sides, said second side including a hooked slot and a helical second slot formed therein opposing said helical first slot"; "a torsion spring extending between a hub end and a carrier end for transferring torque between said hub and carrier, wherein said hub end is retained in said helical first slot to prevent relative movement between said hub end of said torsion spring and said hub and said carrier end is retained in said helical second slot in said second side of said carrier to prevent relative movement between said carrier end of said torsion spring and said carrier"; and "a clutch spring extending between a hooked proximal end and an opposite distal end, wherein said hooked proximal end is retained in said hooked slot in said second side of said carrier to prevent relative movement between said hooked proximal end of said clutch spring and said carrier"

The Examiner identifies an output hub 17, an input hub 16, a compression spring 33, and a wrap spring 22 in the '248 reference as equivalent to the hub 22, the carrier 75, the torsion spring 90, and the clutch spring 71, respectively, in the above-captioned application.

The '248 reference does not provide any disclosure of the input hub 16 including a second side having a hooked slot and a helical second slot opposing a helical first slot in the output hub 17. The '248 reference discloses that the compression spring 33 and the wrap spring 22 are disposed on opposite sides of a radially extending flange 30 of the input hub 16. Thus, if a carrier end of the compression spring 33 is retained in a helical second slot in the input hub 16 and a hooked proximal end of the wrap spring 22 is retained in a hooked slot in the input hub 16, the helical second slot and the hooked slot must be opposing as they would be located on opposite sides of the radially extending flange 30. If the helical second slot and the hooked slot are opposing, then the helical second slot and the hooked slot cannot both oppose a first helical slot in the output hub 17. **Therefore, the '248 reference does not disclose a carrier including a second side having a hooked slot and a helical second slot formed therein opposing a helical first slot in a hub, as specifically required by new claim 31 of the above-captioned application.** Thus, new claim 31 is allowable.

Independent claim 32 has been added. Claim 32 includes the limitation "a bearing member directly engaging said pulley and said hub for rotatably mounting said pulley on said hub."

The Examiner identifies a bearing 20, a pulley sheave 18, and an output hub 17 in the '248 reference as equivalent to the bearing member 57, the pulley 50, and the hub 22, respectively, in the above-captioned application.

The '248 reference does not provide any disclosure of the bearing 20 directly engaging the pulley sheave 18 and the output hub 17. Rather, the '248 reference discloses that the bearing 20 directly engages the pulley sheave 18 and the input hub 16, not the output hub 17. **Therefore, the '248 reference does not disclose a bearing member directly engaging a pulley and a hub for rotatably mounting the pulley on the hub, as specifically required by new claim 32 of the above-captioned application.** Thus, new claim 32 is allowable.

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It is respectfully submitted that this patent application is in condition for allowance, which allowance is respectfully solicited. If the Examiner has any questions regarding this amendment or the patent application, the Examiner is invited to contact the undersigned.

The Commissioner is hereby authorized to charge any additional fee associated with this Communication to Deposit Account No. 50-1759. A duplicate of this form is attached.

Respectfully submitted,



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